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Appl. No. 10/811,042
Amld. dated January 19, 2007
Reply to Office Action of October 19, 2006
Attorney Duckel 17540

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A hydraulic system for a work vehicle, comprising:
 - a first hydraulic pump configured to generate a first flow of hydraulic fluid;
 - a priority valve in fluid communication with the pump, said priority valve being configured to distribute the first flow to a primary outlet and to a secondary outlet;
 - a plurality of open center hydraulic valves coupled to the secondary outlet;
 - a hydraulic reservoir coupled to the plurality of open center hydraulic valves to receive the first flow after passing through the plurality of open center valves;
 - a plurality of closed center hydraulic valves coupled to the primary outlet; and
 - a second hydraulic pump configured to generate a second flow of hydraulic fluid; and coupled to and driving the plurality of closed center hydraulic valves via a reloader valve in fluid communication with the secondary pump, the reloader valve configured to distribute the second flow to the plurality of closed center valves, and further configured to prevent the secondary flow to the closed center valves when no demand signal is sensed being responsive to some loads that control the priority valve and independent of other loads that control the priority valve.
2. (original) The system of claim 1, wherein the first hydraulic pump is a fixed displacement gear pump, and further wherein the priority valve is responsive to a load on the plurality of closed center valves.
3. (original) The system of claim 2, wherein the plurality of closed center valves includes at least one valve selected from the group comprising a boom swing cylinder control valve, a boom cylinder control valve, a dipper cylinder control valve, and a bucket cylinder control valve.
4. (original) The system of claim 3, wherein the plurality of open center valves include at least one valve selected from the group comprising a loader bucket cylinder valve and a loader arm cylinder valve.

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5. (cancelled)

6. (original) The system of claim 1, wherein no inlet compensator is in fluid communication with and disposed between the plurality of closed center hydraulic valves and the first pump.

7. (cancelled)

8. (currently amended) The system of claim 1, ~~further comprising a reloader valve coupled to and between the second hydraulic pump and the plurality of closed center valves, the reloader valve being responsive to a load signal on a load signal line coupled to the plurality of closed center valves.~~

9. (currently amended) A hydraulic system for a work vehicle, comprising:
an engine;
a first hydraulic pump driven by the engine and configured to generate a flow of hydraulic fluid;
a priority valve in fluid communication with the pump, said priority valve being configured to distribute the flow to a primary outlet and to a secondary outlet;
a plurality of open center hydraulic valves coupled to one of the primary and secondary outlets;
a plurality of closed center hydraulic valves coupled to another of the primary and secondary outlets;
a hydraulic reservoir;
a second hydraulic pump driven by the engine and configured to provide hydraulic fluid to the plurality of closed center valves, wherein the second hydraulic pump is coupled to and drives only the plurality of closed center hydraulic valves in conjunction with the first pump in at least one mode of operation, further wherein the coupling between the second hydraulic pump and the plurality of closed center valves includes a reloader valve configured to be responsive to at least one load that controls the priority valve such that there also exists at least one mode of operation in which the hydraulic fluid provided by the second hydraulic

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pump is returned to the hydraulic reservoir without passing through either of the plurality of open center valves or the plurality of closed center valves.

10. (original) The system of claim 9, wherein the first and second hydraulic pumps are fixed displacement gear pumps.

11. (original) The system of claim 10, wherein the plurality of closed center valves include at least one valve selected from the group comprising a boom swing actuator control valve, a boom actuator control valve, a dipper actuator control valve, and a bucket actuator control valve.

12. (original) The system of claim 11, wherein the plurality of open center valves include at least one valve selected from the group comprising a loader bucket actuator valve and a loader arm actuator valve.

13-14. (cancelled)

15. (previously presented) The system of claim 9, wherein the second hydraulic pump is configured to be independent of at least one load that controls the priority valve.

16. (previously presented) The system of claim 9, wherein no inlet compensator is in fluid communication with and disposed between the plurality of closed center hydraulic valves and the first pump.

17. (cancelled)

18. (new) The system of claim 1, wherein the second flow is directed to the hydraulic reservoir when no demand signal is received by the reloader valve.

19. (new) The system of claim 1, wherein the first flow passes directly to the fluid reservoir from the plurality of open center valves.

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20. (new) The system of claim 1, wherein the plurality of closed center valves are supplied by solely by one or more flows of hydraulic fluid which do not pass through the plurality of open center valves.